

0069525

SAF-RC-001
Industrial Hygiene Sampling
FINAL DATA

NO DISTRIBUTION REQUIRED

COMMENTS:

SDG 06I-0428-01 SAF-RC-001

Rad only ☒ Chem only Rad & Chem

☒ Complete Partial

300 Area 334 Bldg

RECEIVED
MAY 04 2006

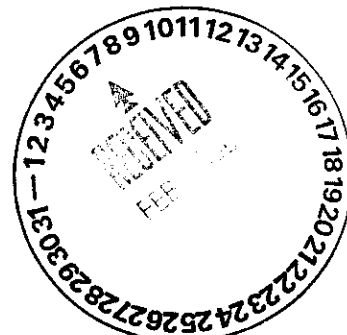
EDMC



Cover Page

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Report Identification Number: 06I-0428-01
Subcontract Number: 0000X-BO-G0058-B-Mod#4
Name of Industrial Hygienist: Denise A. Pitts / Henry W. Ruby
Laboratory Identification Number: DCHM
SAF#: RC-001 / R33400J452
Payroll#: 8C104



Sample Information

Sample Date	Customer Sample Number	Laboratory Sample Number	Method	Analytical Batch Identification	Sample Matrix
02 Feb 2006	J113B9	06I03419	NMAM 7300M	G0615004	G WIPE
02 Feb 2006	J113B8	06I03420	NMAM 7300M	G0615004	G WIPE
02 Feb 2006	J113J1	06I03421	NMAM 7300M	G0615004	G WIPE
02 Feb 2006	J10YK2	06I03422	NMAM 7300M	G0615004	G WIPE

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Name: Lisa M. Reid
Title: Chemist
Date: February 07, 2006



Case Narrative Page

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Report Identification Number: 06I-0428-01
Subcontract Number: 0000X-BO-G0058-B-Mod#4
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Laboratory Identification Number: DCHM
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General Set Information: There are 4 samples in set 06I-0427-01, 4 samples in set 06I-0428-01 and 4 samples in set 06I-0429-01 which were analyzed for cadmium, lead and beryllium on Ghost Wipe. No problems were encountered with the receipt of these samples and no contact with the CTR was required.

Method Summary: Samples were transferred to 50 ml centrifuge tubes and digested in the presence of 5 mL of nitric acid and 5 mL of ASTM Type II water. Samples were digested in a hot block set at 110°C for 60 minutes. Samples were then diluted to a 25 mL volume with ASTM Type II Water. Samples were shaken and delivered for ICP analysis.

Sample Preparation: All samples were prepared in accordance with DCL SOP "IH-AN-021" and NIOSH method NMAM 7300 modified for hot block digestion.

Holding Times: The holding times were met for both sample preparation and analysis.

Instrument Calibration: Instrument calibration was performed in accordance with NIOSH method NMAM 7300.

Initial and Continuing Calibration Verification Analysis: Beryllium, cadmium and lead recoveries in all Initial Calibration Verification (ICV) and Continuing Calibration Verification (CCV) samples are within the quality control limits of +/- 10%.

Initial and Continuing Calibration Blank Analysis: No beryllium results were found in the Initial Calibration Blank (ICB) or Continuing Calibration Blanks (CCB) at levels above the Contract Required Detection Limits (CRDL) of 0.01 ug/sample. No cadmium results were found in the Initial Calibration Blank (ICB) or Continuing Calibration Blanks (CCB) at levels above the Contract Required Detection Limits (CRDL) of 0.1 ug/sample. No lead results were found in the Initial Calibration Blank (ICB) or Continuing Calibration Blanks (CCB) at levels above the Contract Required Detection Limits (CRDL) of 3. ug/sample.

Method Blank Analysis: No beryllium, cadmium or lead was found in any of the media blank samples above the Contract Required Detection Limit (CRDL).

Dilution(s): None.

Laboratory Control Sample and Duplicate Analysis: One Laboratory Control Sample (LCS) and one Laboratory Control Sample Duplicate (LCSD) were prepared and analyzed with the sample batch. The LCS results were within the control limits of +/- 20%. The Relative Percent Difference (RPD) between the LCS and the LCSD were within the control limit of 20%.

Replicate Analysis: Two samples in this batch were replicated. The RPD between the samples and the replicates was within the control limit of 20%. If the result of the sample or replicate is below the CRDL, replicate analysis is negligible.

Flagging Codes: None

Nonconformance/Corrective Action Report (NC/CAR): N/A

Sample Calculation: The final results are calculated by the following equation:
Final result for aqueous samples ($\mu\text{g}/\text{sample}$) = (A) x (B) x (C)

Where:

A = Analyte concentration from instrument determination ($\mu\text{g}/\text{L}$)

B = Concentration factor from sample preparation
= Final Volume of Digestate (L)

Sample

C = Dilution performed at time of analysis

Example Calculation: $(1 \mu\text{g}/\text{L}) \times (0.025 \text{ L}/\text{sample}) \times (1) = 0.025 \mu\text{g}/\text{sample}$

Miscellaneous Comments: None



Report Page

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SAF#: RC-001 / R33400J452
Payroll#: 8C104

Customer Sample Number	Laboratory Sample Number	Date Analyzed	Beryllium µg/sample		Cadmium µg/sample		Lead µg/sample	
J113B9	06I03419	06 Feb 2006	0.025		<0.1	U	<3.	U
J113B8	06I03420	06 Feb 2006	<0.01	U	<0.1	U	<3.	U
J113J1	06I03421	06 Feb 2006	<0.01	U	<0.1	U	<3.	U
J10YK2	06I03422	06 Feb 2006	<0.01	U	<0.1	U	<3.	U
Limit of Detection (LOD)			0.01		0.1		3.	
Required Detection Limit (RDL)								

U - Parameter not detected above LOD.

J - Parameter between LOD and RDL.



QC Summary Page

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Report Identification Number: 06I-0428-01
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Name of Industrial Hygienist: Denise A. Pitts / Henry W. Ruby
Laboratory Identification Number: DCHM
SAF: RC-001 / R33400J452
Payroll#: 8C104

Batch ID: G0615004

QC Sample ID	QC Type	Analyte	Units	Result	Parent Result	Target	Percent Rec.	Relative Percent Diff.
BL-240888-1	MB	Beryllium	µg/sample	ND	NA	NA	NA	NA
BL-240888-1	MB	Cadmium	µg/sample	ND	NA	NA	NA	NA
BL-240888-1	MB	Lead	µg/sample	ND	NA	NA	NA	NA
QC-240888-1	LCS	Beryllium	µg/sample	11.6	NA	10.0	116.	NA
QC-240888-1	LCS	Cadmium	µg/sample	32.2	NA	30.0	107.	NA
QC-240888-1	LCS	Lead	µg/sample	103.	NA	100.	103.	NA
QD-240888-1	LCSD	Beryllium	µg/sample	12.0	11.6	10.0	120.	3.52
QD-240888-1	LCSD	Cadmium	µg/sample	32.8	32.2	30.0	109.	1.91
QD-240888-1	LCSD	Lead	µg/sample	105.	103.	100.	105.	1.29

MB - Method Blank

LCS - Laboratory Control Sample

LCSD - Laboratory Control Sample Duplicate

MS - Matrix Spike

MSD - Matrix Spike Duplicate

LD - Laboratory Duplicate

NA - Not Applicable

ND - Parameter not detected above LOD

$LCS, LCSD \text{ Percent Rec.} = (\text{Result} / \text{Target}) * 100.0$

$MS, MSD \text{ Percent Rec.} = ((\text{Result} - \text{Parent}) / \text{Target}) * 100.0$

$LCS, LCSD \text{ Relative Percent Diff.} = ((|LCS - LCSD|) / ((LCS + LCSD)/2.0)) * 100.$

$MS, MSD \text{ Relative Percent Diff.} = ((|MS - MSD|) / ((MS + MSD)/2.0)) * 100.$

$LD \text{ Relative Percent Diff.} = ((|Parent - LD|) / ((Parent + LD)/2.0)) * 100$

8544 9435 4726

CHAIN OF CUSTODY SAMPLE ANALYSIS REQUEST									
Collector: Carla Hughes		Company Contact: Denise A. Pitts and Henry W. Ruby		Telephone No. 531-1259		Project Coordinator: Joan H. Kessner		Data Transmitted: STANDARD	
Payroll #: 80104		Sampling Location: 300 Area 334		SPECIAL INSTRUCTIONS: All relevant COAs must be provided: R33400 J452		SAF No. RC-001		Method of Shipment: Fed Ex	
Type of Sample: WIPES		Wipe Sample Media: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		ANALYSIS METHOD (SPECIFIC): NIOSH 7300 - Be/ Pb/Cd		BIM of Lading/Air Bill No. 8544 9435 4726			
Shipped To: DataChem		Special Handling and/or Storage: N/A		PRESERVATION (i.e., cooling required, etc.):					
POSSIBLE SAMPLE HAZARD/REMARKS: Be/Cd/Lead		MATRIX: A - AIR, W1 - WIFE, X - OTHER							
SAMPLE NO.		MATRIX		SAMPLE DATE		VOLUME (L) or Area (cm ²)		COMMENTS	
J113B9	W1	2-2-06	100 cm ²	N/A	No	No	No	No	No
J113B8	W1	2-2-06	100 cm ²	N/A	No	No	No	No	No
J113J1	W1	2-2-06	N/A	Blank	No	No	No	No	No
J10YK2	W1	2-2-06	N/A	Blank	No	No	No	No	No
<p>OKH 2-2-06</p> <p>OKH 2-2-06</p> <p>OKH 2-2-06</p> <p>OKH 2-2-06</p>									

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WCH-SH-302 (REV 2/2005)

Enter on line below the first Sample Number from Page One:

J113 B9

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			
SIGN / PRINT NAMES / USE MILITARY TIME			
Received By/Date	DATE / TIME	Received By/Date	DATE / TIME
Carla Hughes/Carla Hughes	2-2-06 / 1430	Locked Cabinet 300 Area, 3764 Bldg, RM16	2-2-06 / 1430
Received By/Date	DATE / TIME	Received By/Date	DATE / TIME
Locked cabinet bldg 3764 RM #16		RZ Steffler R.Z. Steffler	2-2-06 / 1500
Received By/Date	DATE / TIME	Received By/Date	DATE / TIME
Golden Walker Golden Walker	2-2-06 1500		
Received By/Date	DATE / TIME	Received By/Date	DATE / TIME
RZ Steffler R.Z. Steffler	2-2-06 1600	Fed Ex	
Received By/Date	DATE / TIME	Received By/Date	DATE / TIME
Fed Ex		Dulin Worreath	2/3/06 1030
Received By/Date	DATE / TIME	Received By/Date	DATE / TIME
Metals 3 JW			
Received By/Date	DATE / TIME	Received By/Date	DATE / TIME
Received By/Date	DATE / TIME	Received By/Date	DATE / TIME
Received By/Date	DATE / TIME	Received By/Date	DATE / TIME
LABORATORY SECTION	Received By	Title	DATE / TIME
	Dulin Worreath		2/3/06 1030

REVIEWED BY:

DATE:

PRINT/SIGN NAME

WCH-SH-202 (08/24/2005)

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Enter on line below the first Sample Number from Page One:

J113 B9

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST			
SIGN / PRINT NAMES / USE MILITARY TIME			
Relinquished By/Sign:	DATE / TIME:	Received By/Sign:	DATE / TIME:
Carla Hughes / Carla Hughes	2-2-06 / 1430	Locked Cabinet 300 Area, 3764 Bldg. Rm 16	2-2-06 / 1430
Relinquished By/Sign:	DATE / TIME:	Received By/Sign:	DATE / TIME:
locked cabinet bldg 3764 Rm #16			
Gailie Walker / Gailie Walker	2-2-06 1500	RZ Steffler R.Z. Steffler	2-2-06 / 1500
Relinquished By/Sign:	DATE / TIME:	Received By/Sign:	DATE / TIME:
RZ Steffler R.Z. Steffler	WCH 2-2-06 1100	Fed Ex	
Relinquished By/Sign:	DATE / TIME:	Received By/Sign:	DATE / TIME:
Relinquished By/Sign:	DATE / TIME:	Received By/Sign:	DATE / TIME:
Relinquished By/Sign:	DATE / TIME:	Received By/Sign:	DATE / TIME:
Relinquished By/Sign:	DATE / TIME:	Received By/Sign:	DATE / TIME:
Relinquished By/Sign:	DATE / TIME:	Received By/Sign:	DATE / TIME:
Relinquished By/Sign:	DATE / TIME:	Received By/Sign:	DATE / TIME:
LABORATORY SECTION	Received By	Title	DATE / TIME

REVIEWED BY: _____

DATE: _____

PRINT/SIGN NAME